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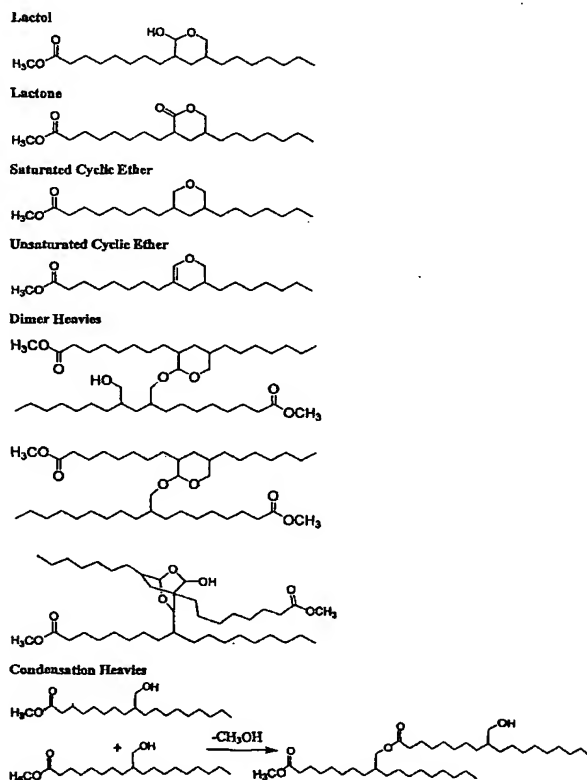
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- (71) Applicant (for all designated States except US): **DOW GLOBAL TECHNOLOGIES INC.** [US/US]; Washington Street, 1790 Building, Midland, MI 48674 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **LYSENKO, Zenon** [CA/US]; 214 West Meadowbrook Drive, Midland, MI 48640 (US). **MORRISON, Donald, L.** [US/US]; 2630

Willow Creek Drive, Fort Collins, CO 80527 (US). **BABB, David, A.** [US/US]; 313 Narcissus Street, Lake Jackson, TX 77566 (US). **BUNNING, Donald, L.** [US/US]; 925 Woodland Avenue, South Charleston, WV 25303 (US). **DERSTINE, Christopher, W.** [US/US]; 9 Windsong Acres, Winfield, WV 25213 (US). **GILCHRIST, James, H.** [US/US]; 376 Roxalana Hills Drive, Dunbar, WV 25064 (US). **JOUETT, Ray, H.** [US/US]; 15726 Spring Forest Drive, Houston, TX 77059 (US). **KANEL, Jeffrey, S.** [US/US]; 89 Gladewood Lane, Hurricane, WV 25526 (US). **OLSON, Kurt, D.** [US/US]; 5442 Longview Drive, Cross Lanes, WV 25313 (US). **PENG, Wei-Jun** [CN/US]; 126 Willowood Circle, Hurricane, WV 25526 (US). **PHILLIPS, Joe, D.** [US/US]; 108 Zinnia, Lake Jackson, TX 77566 (US). **ROESCH, Brian, M.** [US/US]; 106 Monterey Lane, Cross Lanes, WV 25313 (US). **SANDERS, Aaron, W.** [US/US]; 3503 Corbett Court, Missouri City, TX 77459 (US). **SCHROCK, Alan, K.** [US/US]; 204 River Oaks Drive, Lake Jackson, TX 77566

[Continued on next page]

(54) Title: ALDEHYDE AND ALCOHOL COMPOSITIONS DERIVED FROM SEED OILS



(57) Abstract: An aldehyde composition derived by hydroformylation of a transesterified seed oil and containing a mixture of formyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoformyl, greater than about 1 to less than about 65 percent diformyl, and greater than about 0.1 to less than about 10 percent triformyl-substituted fatty acids or fatty acid esters, and having a diformyl to triformyl weight ratio of greater than about 5/1; preferably, greater than about 3 to less than about 20 percent saturates; and preferably, greater than about 1 to less than about 20 percent unsaturates. An alcohol composition derived by hydrogenation of the aforementioned aldehyde composition, containing a mixture of hydroxymethyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoalcohol {mono(hydroxymethyl)}, greater than about 1 to less than about 65 percent diol {di(hydroxymethyl)}, greater than about 0.1 to less than about 10 percent triol, tri(hydroxymethyl)-substituted fatty acids or fatty acid esters; preferably greater than about 3 to less than about 35 percent saturates; and preferably, less than about 10 percent unsaturates. The alcohol composition can be converted into an oligomeric polyol for use in the manufacture of polyurethane slab stock flexible foams.

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(US). THOMAS, P., J. [US/US]; 4310 Andre Street, Midland, MI 48642 (US).

(74) Agent: ZUCKERMAN, Marie, F.; The Dow Chemical Company, Intellectual Property Section, P.O. Box 1967, Midland, Michigan 48674-1967 (US).

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